

Title (en)

APPARATUS FOR A RAPID DETERMINATION OF THE RHEOLOGICAL PROPERTIES OF THERMOPLASTIC MATERIALS

Publication

EP 0210689 B1 19891213 (FR)

Application

EP 86201191 A 19860708

Priority

FR 8511146 A 19850718

Abstract (en)

[origin: US4680958A] Apparatus composed of a control and monitoring unit 1, a thermostated cylinder 2 receiving a measured quantity of material to be evaluated, a plunger 3 sliding in the cylinder 2, an exchanger system enabling the cylinder 2 to be equipped with a suitable die 6 for the measurement to be carried out, a stepping-control motor 7 ensuring a monitored travel of the plunger 3, a force-sensor 9 yielding a signal as a function of the force applied to the plunger 3, and an electronic microprocessor system monitoring the stepping motor 7 as a function of the position of the piston and/or of the signal emitted by the force-sensor 9 at the end of the time assigned to the thermal conditioning of the measured quantity to be evaluated, the plunger 3 is situated at a distance from the die 6 permitting the measurement and acts for 10 to 180 seconds on the measured quantity according to a parameter of the speed of travel of the plunger or of the applied force specified by the measurement to be carried out.

IPC 1-7

G01N 11/04; **G01N 33/44**

IPC 8 full level

B29C 48/92 (2019.01); **G01N 11/04** (2006.01); **G01N 33/44** (2006.01)

CPC (source: EP KR US)

B29C 48/92 (2019.01 - EP KR US); **G01N 11/04** (2013.01 - EP KR US); **B29C 48/05** (2019.01 - EP US); **B29C 2948/92028** (2019.01 - EP US); **B29C 2948/92085** (2019.01 - EP US); **B29C 2948/922** (2019.01 - EP US); **B29C 2948/92209** (2019.01 - EP US); **B29C 2948/92314** (2019.01 - EP US); **B29C 2948/924** (2019.01 - EP US); **B29C 2948/92457** (2019.01 - EP US); **B29C 2948/92485** (2019.01 - EP US); **B29C 2948/92523** (2019.01 - EP US); **B29C 2948/92571** (2019.01 - EP US); **B29C 2948/9258** (2019.01 - EP US); **B29C 2948/92704** (2019.01 - EP US); **B29C 2948/92809** (2019.01 - EP US); **B29C 2948/92895** (2019.01 - EP US); **B29C 2948/92952** (2019.01 - EP US)

Citation (examination)

DE 7640849 U1

Cited by

EP0483619A3; US5016467A; CN102713559A; EP0489662A1; FR2670289A1; EP0311300A3; GB2210466A; US4933886A; GB2210466B; FR2974177A1; WO2011065932A2; WO2014083039A1; WO2011065932A3; WO2012143196A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0210689 A1 19870204; **EP 0210689 B1 19891213**; AT E48700 T1 19891215; AU 578370 B2 19881020; AU 5976286 A 19870122; CA 1257699 A 19890718; DE 3667540 D1 19900118; ES 2000350 A6 19880216; FR 2585130 A1 19870123; FR 2585130 B1 19871009; IN 167028 B 19900818; JP S6221040 A 19870129; KR 870001467 A 19870314; KR 940008080 B1 19940901; MX 168433 B 19930525; US 4680958 A 19870721

DOCDB simple family (application)

EP 86201191 A 19860708; AT 86201191 T 19860708; AU 5976286 A 19860704; CA 513895 A 19860716; DE 3667540 T 19860708; ES 8600355 A 19860717; FR 8511146 A 19850718; IN 579DE1986 A 19860701; JP 16897486 A 19860717; KR 860005546 A 19860709; MX 310886 A 19860711; US 88643986 A 19860717